SERVICE MANUAL

POWER AMPLIFIER

SANSUI BA-5000

Sansui

SANSUI ELECTRIC CO., LTD.

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This service manual is designed for service engineers to repair, adjust, maintain and order the replacement parts of the BA-5000 correctly.
When ordering the parts, use the stock number and parts name specifically referring to the Parts Locations & Parts Lists.
For general usage and maintenance of the unit, please refer to the Operating Instructions attached with the unit.

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1. SPECIFICATIONS

POWER OUTPUT

Min. RMS, both channels driven, from 20 to 20,000Hz, with no more than 0.1% total harmonic distortion in stereo operation

300 watts per channel into 2 ohms
300 watts per channel into 4 ohms
300 watts per channel into 8 ohms

Min. RMS. both channels driven, at 1,000Hz, with no more than 0.1% total harmonic distortion in stereo operation.

320 watts per channel into 2 ohms
320 watts per channel into 4 ohms
320 watts per channel into 8 ohms

Min. RMS, from 20 to 20,000Hz, with no more than 0.1% total harmonic distortion in mono operation.

600 watts into 4 ohms
600 watts into 8 ohms
600 watts into 16 ohms

Min. RMS, at 1,000Hz, with no more than 0.1% total harmonic distortion in mono operation.

640 watts into 4 ohms
640 watts into 8 ohms
640 watts into 16 ohms

LOAD IMPEDANCE

In stereo operation .....2, 4, 8 ohms
In mono operation .....4, 8, 16 ohms

POWER BANDWIDTH .....20 to 20,000Hz at or below rated min. RMS, power output and total harmonic distortion

TOTAL HARMONIC DISTRTION

.....less than 0.1% at or below rated min. RMS power output

INTERMODULATION DISTORTION

(70Hz : 7,000Hz=4 : 1 SMPTE method)
.....less than 0.1%

FREQUENCY RESPONSE (at 1 watt)

.....15Hz to 30kHz $^{+0}_{-2}$ dB

DAMPING FACTOR .....approximately 10 at 8 ohms load

CHANNEL SEPARATION (at rated output, 1kHz)

.....better than 60dB

HUM AND NOISE (IHF) ....better than 100dB

INPUT SENSITIVITY AND IMPEDANCE

(1kHz, for rated output) ..700mV 50kilo-ohms

GENERAL

POWER VOLTAGE.....100, 120, 220, 240V 50/60Hz
120V (Usable 110—130V)
(for U.S.A. & Canada only)

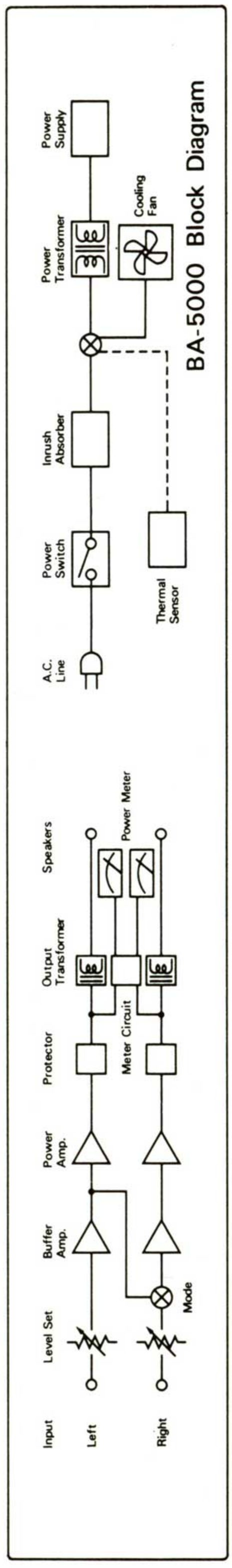
POWER CONSUMPTION..1,350 watts (max.)
490 watts (rated)

DIMENSIONS .....482mm (19″) W
222mm (8 $\frac{3}{4}$″) H
466mm (18$\frac{11}{32}$″) D

WEIGHT .....49kg (108.0 lbs.) net
56kg (123.5 lbs.) packed

* Design and specifications subject to change without notice for improvements.

2. BLOCK DIAGRAM



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3. ADJUSTMENTS

3-1. Driver Circuit Board Adjustments (See Fig. 3-1)

Note: 1. Master Volume.....Minimum
2. Speaker Terminal.....8Ω
3. Room Temperature .....23°±5°C
4. For adjustment, run the unit for more than 3 minutes after then power is switched on.

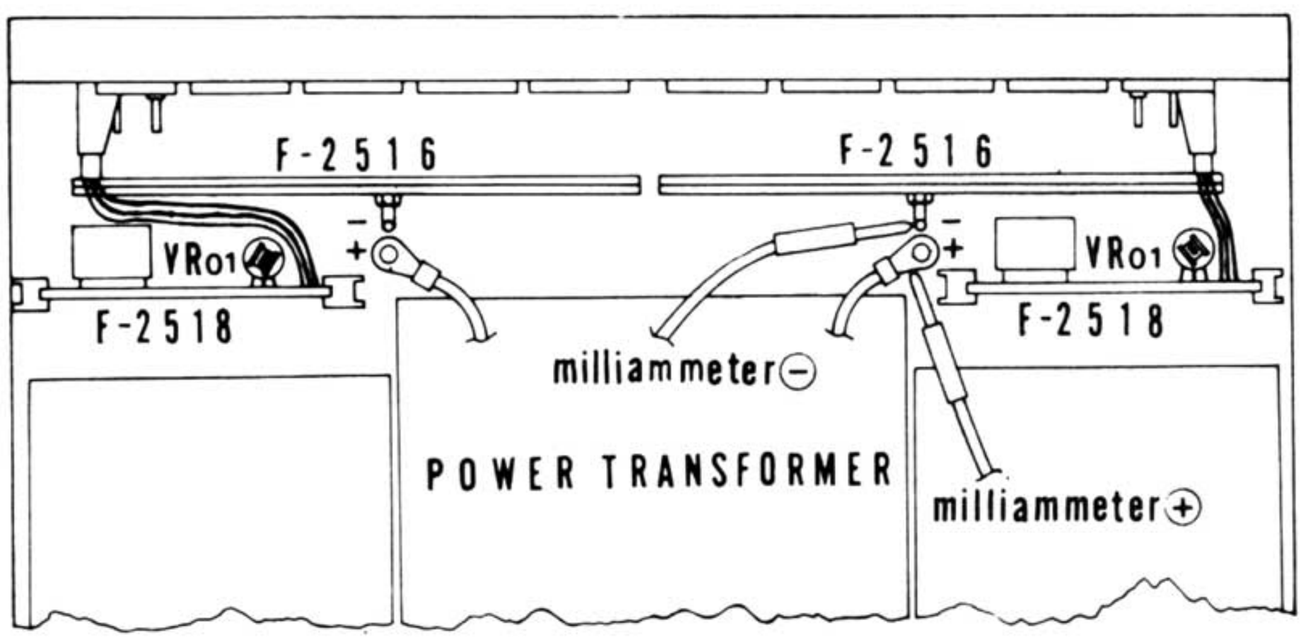
STEP	SUBJECT	EQUIPMENT	MEAURE OUTPUT	ADJUST	ADJUST FOR
1.	Bias Current L-CH	milliammeter	F-2516 Fig. 3-1	F-2518 VR01 (Fig. 3-1)	180mA ±1mA
2.	Bias Current R-CH	milliammeter	F-2516 Fig. 3-1	F-2518 VR01 (Fig. 3-1)	180mA ±1mA

* Take the wires off from power supply section on F-2516. as Fig. 3-1 then set bias current to 180mA.

Note: Milliammeter Polarity : ⊕ side——the wire
: ⊖ side——Tap of F-2516

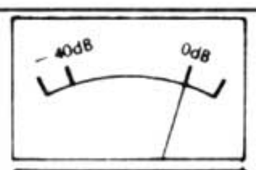
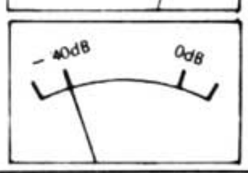
* For confirming the bias current, 180mA run the unit other more then 15 minutes after checking all functions of the unit.

Fig. 3-1



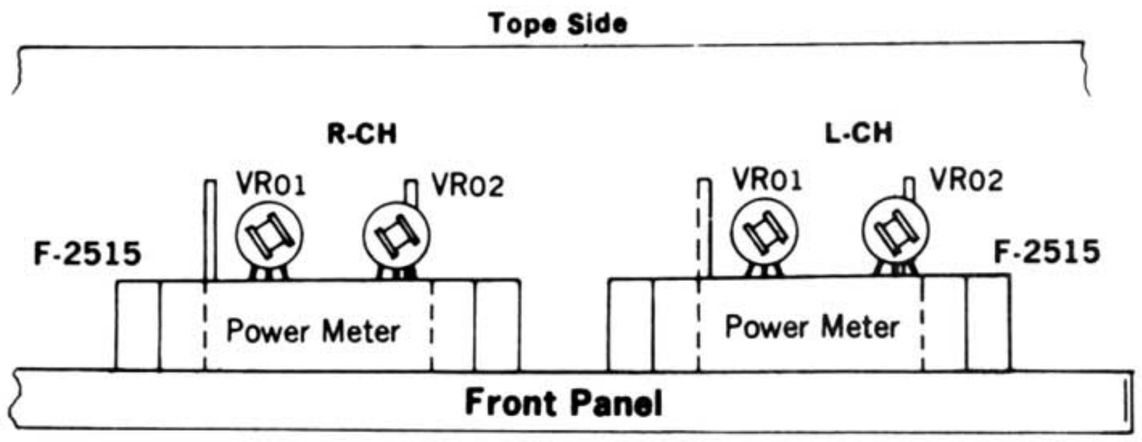
3-2. Power Meter Adjustment

Note: 1. Room temperatnre.....23±5°C
2. Level Volume .....Max.
3. Input signal .....Sine Wave (1kHz)
4. For adjustment, run the unit for more than 5 minutes after then power is switched on.

STEP	SUBJECT	OUTPUT LEVEL	ADJUST	METER POSITION		CONDITION
1.	Power Meter Adjustment	49V (8Ω) (0dB)	F-2515 VR02 (Fig. 3-2)	0dB		VR01 Center
2.	Power Meter Adjustment	490mV (−40dB)	F-2515 VR01 (Fig. 3-2)	−40dB		

* Confirm the Step 1 again. If the meter position is not within 0dB±1dB, repeat from Step 1 and Step 2.

Fig. 3-2



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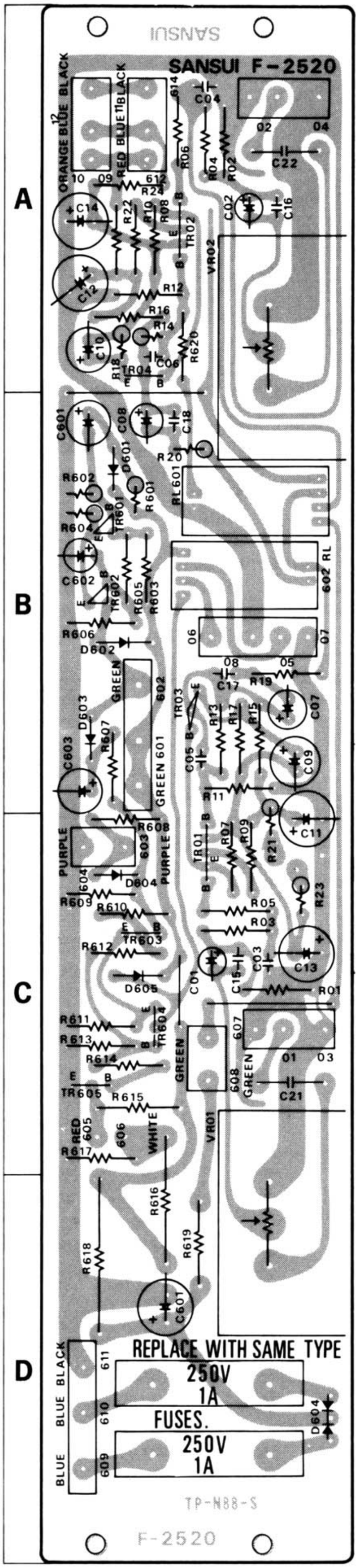
4. PARTS LOCATIONS AND PARTS LISTS

4-1. F-2520 Buffer Amplifier Circuit Board (Stock No. 7592750 Complete Circuit Board F-2520)

Conductor Side



Parts List

Parts No.	Stock. No.	Description			Position
TR01, 02	0360290, 1	2SA798 (F, G) IC			C . A
TR03, 04	0306070, 1	2SC1313 (F G)			B . A
TR601	0306131~3	2SC1364 (6,7,8)			B
TR602	0306131~3	2SC1364 (6,7,8)			B
TR603	0306131~3	2SC1364 (6,7,8) Transistor			C
TR604	0306131~3	2SC1364 (6,7,8)			C
TR605	0306131~3	2SC1364 (6,7,8)			C
D601	0311160	1S2473D			B
D602	0310340	10D-1 (1S2226)			B
D603	0311160	1S2473D Diode			B
D604	0311160	1S2473D			C
D605	0310340	10D-1 (1S2226)			C
D606	0310530	1S1850			
C01, 02	0519101	1μF	50V	E.C.	C . A
C03, 04	0660101	100pF	50V	C.C.	C . A
C05, 06	0660509	5pF			B . A
C07, 08	0519001	10μF	25V	E.C.	B
C09, 10	0510101	100μF	6.3V	E.C.	B . A
C11, 12	0512221	220μF	16V	E.C.	B,C. A,C
C13, 14	0512221	220μF	16V	E.C.	C . A
C15, 16	0601107	0.01μF	50V	M.C.	C . A
C17, 18	0601107	0.01μF			B
C601	0513100	10μF	25V	E.C.	B
C602	0510470	47Fμ	6.3V	E.C.	B
C603	0513100	10μF	25V	E.C.	B
C604	0516470	47μF	6.3V	E.C.	
C901	0516339	3.3μF	63V	E.C.	
R01, 02	0107124	120kΩ			C . A
R03, 04	0107472	4.7kΩ			C . A
R05, 06	0107472	4.7kΩ			C . A
R07, 08	0107223	22kΩ			C . A
R09, 10	0107104	100kΩ			C . A
R11, 12	0107153	15kΩ			B . A
R13	0107223	22kΩ			B
R14	0106223	22kΩ			A
R15, 16	0107103	10kΩ			B . A
R17	0107471	470Ω			
R18	0106471	470Ω			A
R19	0107221	220Ω			
R20	0106221	220Ω			B
R21	0106221	220Ω			
R22	0107221	220Ω			A
R23	0106221	220Ω	¼W	C.R.	C
R24	0107221	220Ω			A
R601	0106273	27kΩ			B
R602	0106272	2.7kΩ			A
R603	0107123	12kΩ			B
R604	0106150	15Ω			B
R605	0107472	4.7kΩ			B
R606	0107153	15kΩ			B
R607	0107104	100kΩ			B
R608	0107333	33kΩ			C
R609	0107104	100kΩ			C
R611	0107150	15Ω			C
R612	0107472	4.7kΩ			C
R613	0107153	15kΩ			C
R614	0107122	1.2kΩ			C
R615	0103182	1.8kΩ	½W	C.R.	C
R616	0182561	560Ω	2 W	Ce.R.	C, D
R617	0107221	220Ω	¼W	C.R.	C
R618	0135271	270Ω	5 W	Ce.R.	D
R619	0103222	2.2kΩ	½W	C.R.	D
R620	0107223	22kΩ			A
R901	0107563	56kΩ	¼W	C.R.	
R902	0107563	56kΩ			
R903	0107273	27kΩ			
RL601	1150320	10MA 1600Ω Relay			B
RL602	1150320				
VR01	1090160	100kΩ (B) Semi-Variable Resistor			C, D
VR02	1090160				A, B
	2410650	2P (D Type) Pin Ass'y			
	2410580	3P (D Type)			
	2410590	4P (D Type)			

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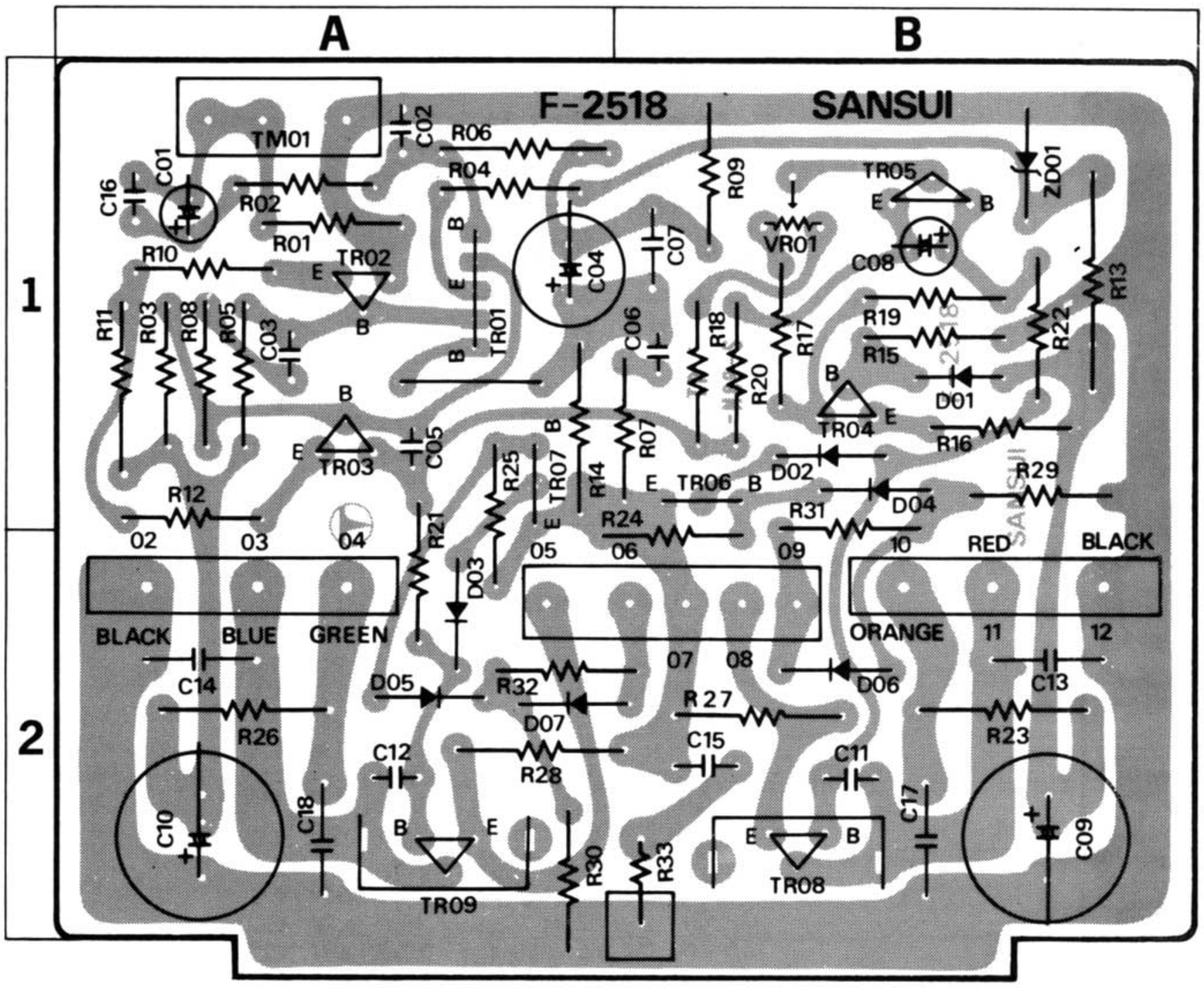
4-2. F-2518 Driver Circuit Board (Stock No. 7571130 Complete Circuit Board F-2518)

Conductor Side



* Please note the followings when replacing transistors TR02, 03, 08, 09. In case that you use 2SC1628 (**O**) as TR02 for repair, use 2SC1628 (**O**) as TR03, or 2SC1628 (**Y**) as TR02 to 2SC1628 (**Y**) as TR03. Also, in case of using 2SD381 (**M**) as TR08, use 2SB536 (**M**) as TR09, or 2SD381 (**L**) as TR08 to 2SB536 (**L**) as TR09.

Parts List

Parts No.	Stock No.	Description			Position
TR01	0360290, 1	2SA798 (F, G)	I.C		1 A
TR02	0306260 or 0306261	2SC1628 (O) or 2SC1628 (Y)			1 A
TR03	0306260 or 0306261	2SC1628 (O) or 2SC1628 (Y)			1 A
TR04	0300700, 1	2SA818 (O, Y)			1 B
TR05	0305871, 2	2SC984 (B, C)			1 B
TR06	0305951, 2	2SC945 (Q, P)	Transistor		1 B
TR07	0300510, 1	2SA733 (P, Q)			1 A
TR08	0308531 or 0308532	2SD381 (M) or 2SD381 (L)			2 B
TR09	0303371 or 0303372	2SB536 (M) or 2SB536 (L)			2 B
D01	0340120	VD1212	Varistor		1 B
D02	0311160	1S2473D			1 B
D03	0311160	1S2473D			2 A
D04	0311160	1S2473D			1 B
D05	0311160	1S2473D	Diode		2 A
D06	0311160	1S2473D			2 B
D07	0311160	1S2473D			2 A , B
ZD01	0316230	RD-9.1EB	Zener Diode		1 B
C01	0519105	2.2μF	50V	E.C.	1 A
C02	0660101	100pF	50V	C.C.	1 A
C03	0657102	1000pF			1 A
C04	0510221	220μF	6.3V	E.C.	1 A , B
C05	0660220	22pF	50V	C.C.	1 A
C06	0660509	5pF			1 B
C07	0601108	0.1μF	50V	M.C.	1 B
C08	0515109	1μF	50V	E.C.	1 B
C09	0519903	100μF	80V	E.C.	2 B
C10	0519903	100μF			2 A
C11	0660101	100pF	50V	C.C.	2 B
C12	0660101	100pF			2 A
C13	0659011	0.01μF	500V	C.C.	2 B
C14	0659011	0.01μF			2 A
C15	0601477	0.047μF	50V	M.C.	2 B
C16	0601107	0.01μF	50V	M.C.	1 A
C17	0659011	0.01μF	500V	C.C.	2 B
C18	0659011	0.01μF	500V	C.C.	2 A
C901	0660509	5pF	50V	C.C.	
C902	0657102	1000pF			
C903	0657102	1000pF			
R01	0107103	10kΩ			1 A
R02	0107103	10kΩ			1 A
R03	0107332	3.3kΩ			1 A
R04	0107222	2.2kΩ			1 A
R05	0107332	3.3kΩ			1 A
R06	0107333	33kΩ	1/4W	C.R.	1 A
R07	0107473	47kΩ			1 B
R08	0107221	220Ω			1 A
R09	0107222	2.2kΩ			1 B
R10	0107820	82Ω			1 A
R11	0103391	390Ω	1/2W	C.R.	1 A
R12	0107820	82Ω	1/4W	C.R.	1 A
R13	0104472	4.7kΩ	1 W	C.R.	1 B
R14	0107333	33kΩ			1 A
R15	0107473	47kΩ			1 B
R16	0107820	82Ω			1 B
R17	0107152	1.5kΩ			1 B
R18	0107271	270Ω	1/4W	C.R.	1 B
R19	0107560	56Ω			1 B
R20	0107270	27Ω			1 B
R21	0107561	560Ω			1, 2 A
R22	0107471	470Ω			1 B
R23	0103221	220Ω	1/2W	C.R.	2 B
R24	0107471	470Ω	1/4W	C.R.	1, 2 B
R25	0107471	470Ω			1, 2 A
R26	0103221	220Ω	1/2W	C.R.	2 A
R27	0103561	560kΩ			2 B
R28	0103561	560kΩ			2 A , B
R29	0107333	33kΩ	1/4W	C.R.	1 B
R30	0107333	33kΩ			2 A
R31	0107151	150Ω			1, 2 B
R32	0107151	150Ω			2 A , B
R33	0152100	10Ω	2 W	Ce.R.	2 B
VR01	1035280	330Ω(B)	Semi-Variable Resistor		1 B
	2410570	5P (D Type)	Pin Ass'y		
	2410580	3P (D Type)			

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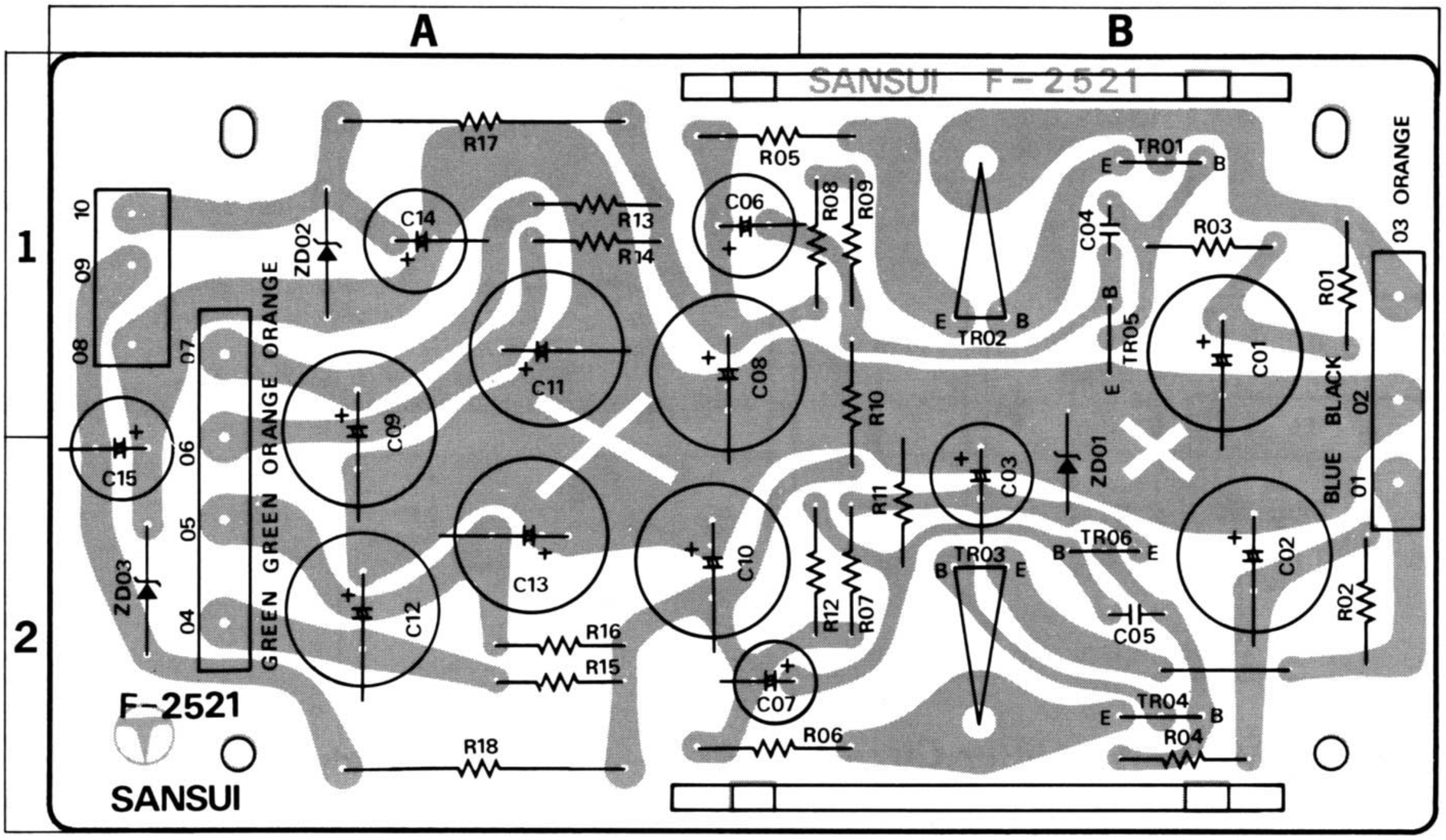
4-3. F-2521 Power Supply Circit Board (Low Voltage)

(Stock No. 7501140 Complete Circuit Board F-2521)

Conductor Side



Parts List

Parts No.	Stock No.	Description			Position
TR01	0306280, 1	2SC1735 (C, D)	Transistor		1 B
TR02	0308441, 2	2SD382 (M, L)			1 B
TR03	0308441, 2	2SD382 (M, L)			2 B
TR04	0300720, 1	2SA850 (C, D)			2 B
TR05	0306270, 1	2SC1708 (F, G)			1 B
TR06	0300710, 1	2SA847 (F, G)			2 B
ZD01	0316510	RD24E	Diode		1, 2 B
ZD02	0315620	EQB01-15			1 A
ZD03	0315620	EQB01-15			2 A
C01	0519903	100μF	80V	E.C.	1, 2 B
C02	0519903	100μF			2 B
C03	0513101	100μF	25V	E.C.	1, 2 B
C04	0660471	470pF	50V	C.C.	1 B
C05	0660471	470pF			2 B
C06	0519404	10μF	100V	E.C.	1 A
C07	0515100	10μF	50V	E.C.	2 A, B
C08	0519903	100μF	80V	E.C.	1, 2 A
C09	0519903	100μF			1, 2 A
C10	0519903	100μF			2 A
C11	0519903	100μF			1 A
C12	0519903	100μF			2 A
C13	0519903	100μF			2 A
C14	0512221	220μF	35V	E.C.	1 A
C15	0512221	220μF	25V	E.C.	1, 2 A
R01	0107103	10kΩ	¼W	C.R.	1 B
R02	0107103	10kΩ			2 B
R03	0107682	6.8kΩ			1 B
R04	0107682	6.8kΩ			2 B
R05	0103150	15Ω	½W	C.R.	1 A, B
R06	0103150	15Ω	½W	Ce.R.	2 A, B
R07	0107682	6.8kΩ	¼W	C.R.	2 B
R08	0107223	22kΩ			1 B
R09	0107103	10kΩ			1 B
R10	0107333	33kΩ			1, 2 B
R11	0107103	10kΩ			2 B
R12	0107153	15kΩ			2 B
R13	0107150	15Ω			1 A
R14	0107150	15Ω			1 A
R15	0107150	15Ω			2 A
R16	0107150	15Ω			2 A
R17	0185102	1kΩ	5 W	Ce.R.	1 A
R18	0185102	1kΩ	5 W	Ce.R.	2 A
	2410650	2P (D Type)	Pin Ass'y		
	2410580	3P (D Type)			

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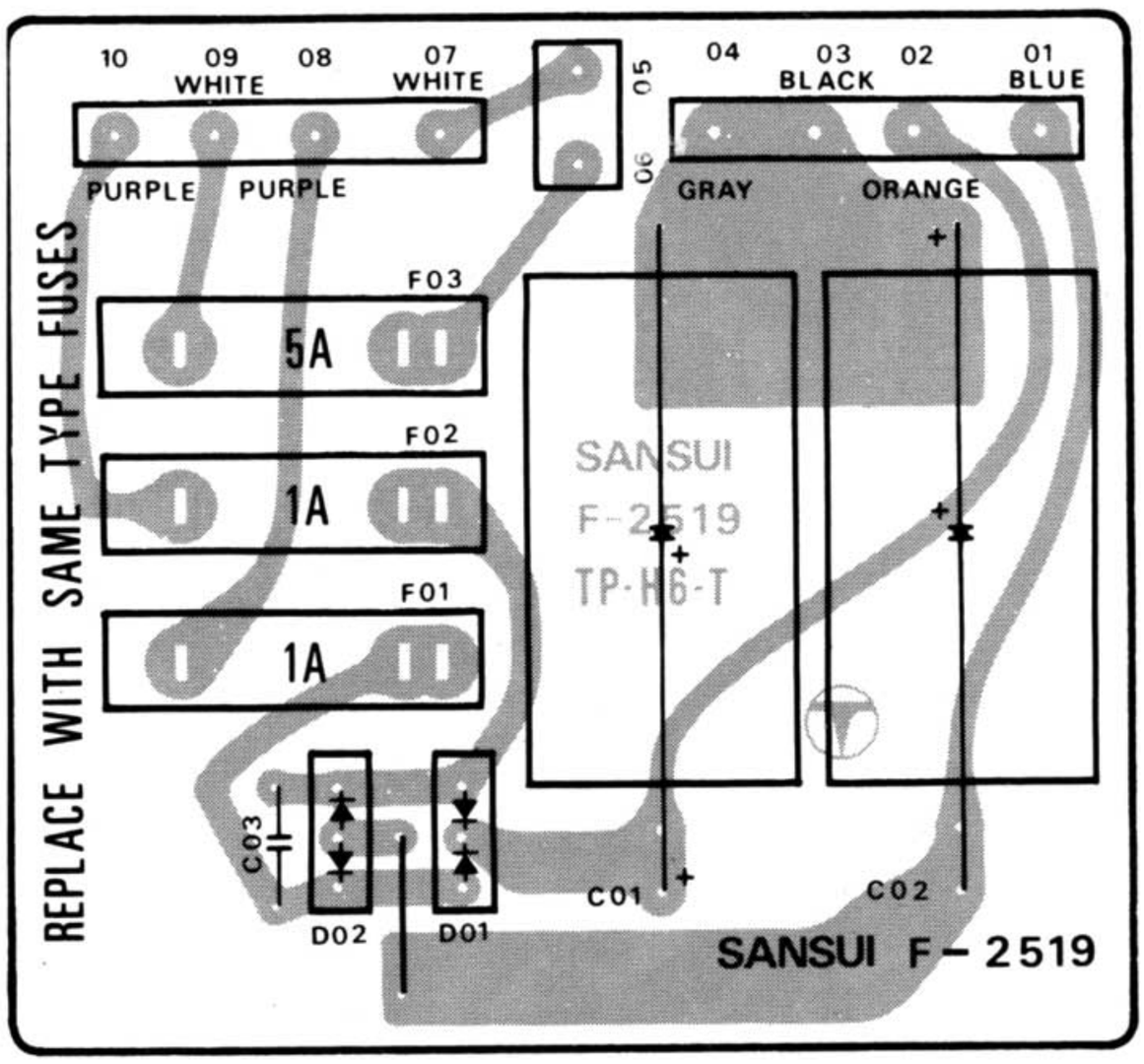
4-4. F-2519 Power Supply Circuit Board (Stock No. 7501130 Complete Circuit Board F-2519)

Conductor Side

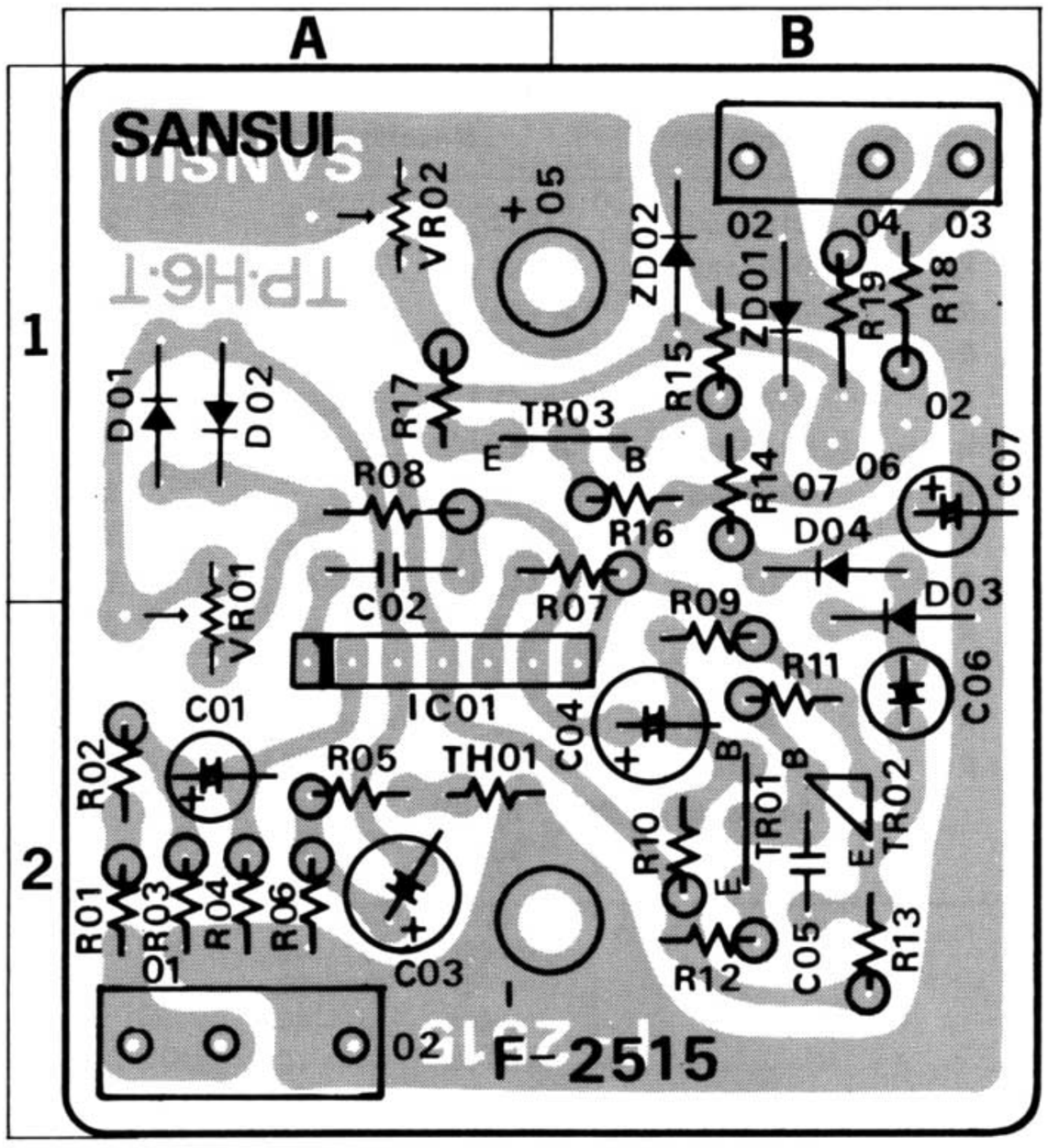


Parts List

Parts No.	Stock No.	Description	Position
D01	0310530	1S1850 } Diode	
D02	0310540	1S1850R }	
C01	0507331	330μF } 100V E.C.	
C02	0507331	330μF }	
F01	0431222	1A 250V 6.35×30MM } Fuse	
F02	0431222	1A 250V 6.35×30MM }	
F03	0431280	Fuse	
	2410650	2P (D Type) Pin Ass'y	

4-5. F-2515 Meter Amplifier Circuit Board (Stock No. 7592720 Complete Circuit Board F-2515)

Conductor Side



Parts List

Parts No.	Stock No.	Description	Position
D01	0340120	VD1212 } Varistor	1A
D02	0340120	VD1212 }	1A
D03	0311160	1S2473D } Diode	1, 2B
D04	0311160	1S2743D }	1B
TH01	0320030	31D27 Thermistor	2A
C01	0515109	1μF 50V E.C.	2A
C02	0660330	33pF 50V C.C.	1A
C03	0513100	10μF } 25V E.C.	2A
C04	0513100	10μF }	2B
C05	0660151	150pF 50V C.C.	2B
C06	0535109	1μF 50V E.C.	2B
C07	0573688	0.68μF 35WV T.C.	1B
C901	0660330	33pF 50V C.C.	
R01	0106153	15kΩ	2A
R02	0106103	10kΩ	2A
R03	0106101	100Ω	2A
R04	0106154	150kΩ	2A
R05	0106102	1kΩ	2A
R06	0106272	2.7kΩ	2A
R07	0106104	100kΩ	1A, B
R08	0106821	820Ω	1A
R09	0106474	470kΩ	1, 2B
R10	0106563	56kΩ	2B
R11	0106183	18kΩ	2B
R12	0106332	3.3kΩ	2B
R13	0106392	3.9kΩ	2B
R14	0106684	680kΩ	1B
R15	0106474	470kΩ	1B
R16	0106182	1.8kΩ	1B
R17	0106331	330Ω	1A
R901	0107681	680Ω	
VR01	1035490	1MΩ (B) } Semi-Variable Resistor	1, 2A
VR02	1035310	1kΩ (B) }	1A
	2410670	3P (F Type) Pin Ass'y	

Parts No.	Stock No.	Description	Position
TR01	0305951, 2	2SC945 (Q, P) } Transistor	2B
TR02	0305951, 2	2SC945 (Q, P) }	2B
TR03	0306071 or 0306091	2SC1313R (G) or 2SC1312R (G) }	1A, B
IC01	0360280	TA-7136P IC	2A

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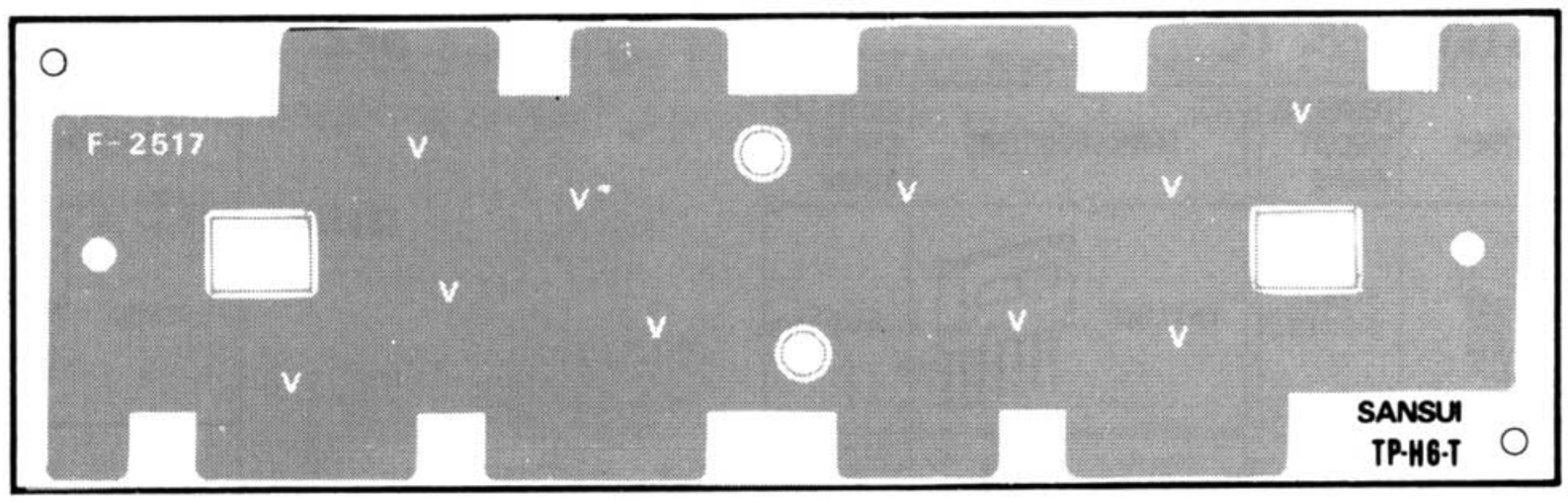
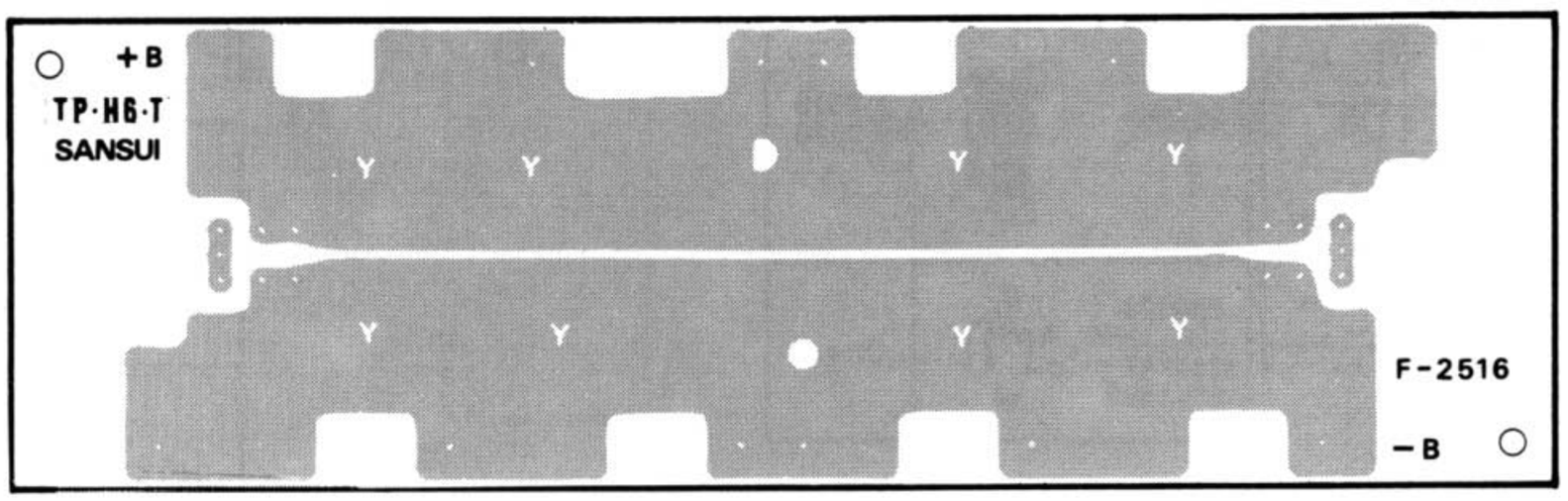
4-6. F-2517 Connector Circuit Board (Stock No. 7592740 Complete Circuit Board F-2517)

Conductor Side



4-7. F-2516 Connector Circuit Board (Stock No. 7592730 Complete Circuit Board F-2516)

Conductor Side

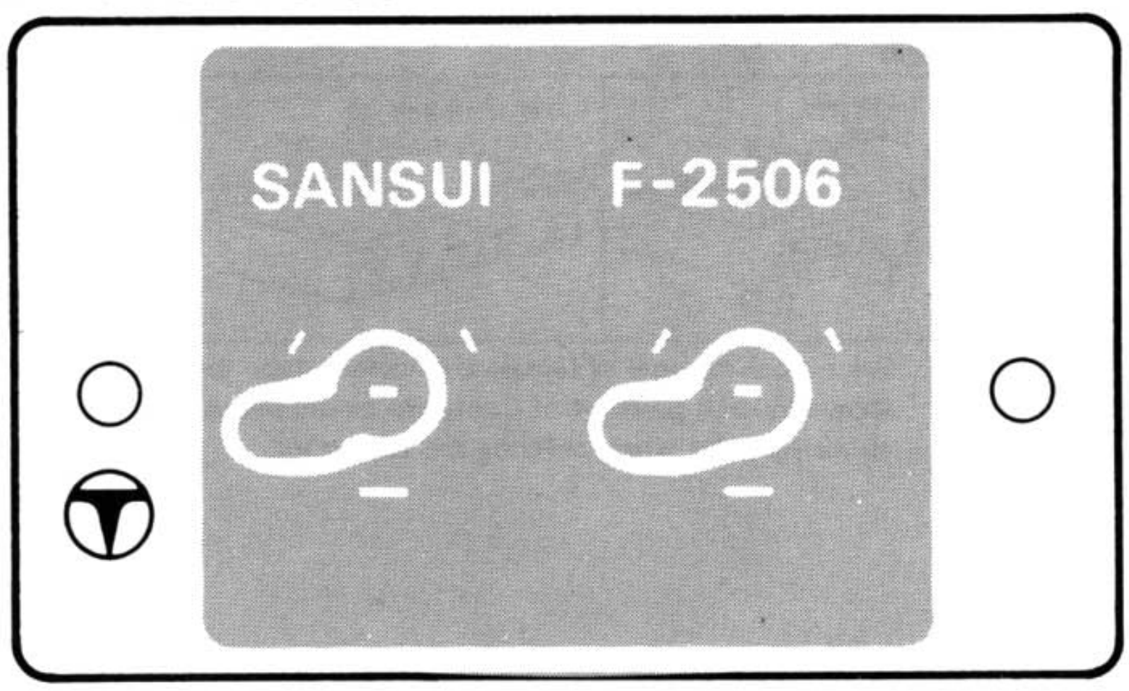


4-8. F-2506 Input Terminal Circuit Board (Stock No. 7592700 Complete Circuit Board F-2506)

Parts List

Parts No.	Stock No.	Description
	2430260	Input Terminal (White)
	2430270	Input Terminal (Red)

Conductor Side



4-9. F-2514 Meter Lamp Circuit Board (Stock No. 7592710 Complete Circuit Board F-2514)

Parts List

Parts No.	Stock No.	Description
PL01	0420050	7V, 300mA } Fuse Type Lamp
PL02	0420050	7V, 300mA } Fuse Type Lamp
PL03	0420050	7V, 300mA } Fuse Type Lamp
	2310051	Fuse Holder

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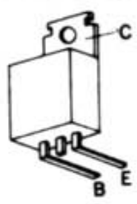
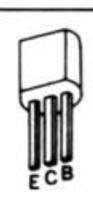
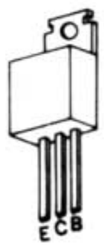
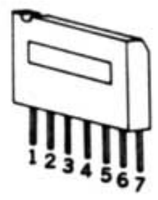
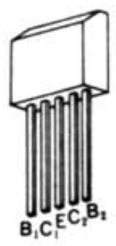
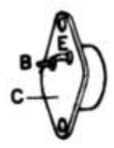
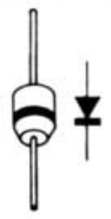
5. FIGURES, CONNECTOR & PIN Ass'y

5-1. Transistor & IC

SEMICONDUCTORS	COMPLETE CIRCUIT BOARD
2SA847 2SC1313 2SC1312 2SC1735 2SA850 2SC1708	F-2521 F-2515
2SD382 	F-2521
2SC1364 2SC945 2SA733 	F-2518 F-2520
2SC984	F-2518
2SD381 2SB536 	F-2518

SEMICONDUCTORS	COMPLETE CIRCUIT BOARD
TA7136P 	F-2515
2SC1628 2SA818	F-2518
2SA798 	F-2518 F-2520
2SA908 2SC1116A 2SA747 2SC1585 	Others

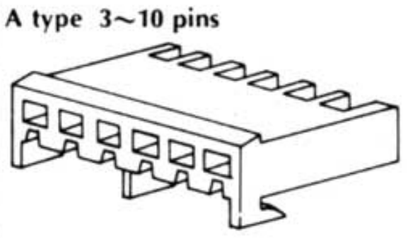
5-2. Diode

SEMICONDUCTORS	COMPLETE CIRCUIT BOARD
1S1850	F-2519 F-2520
RD-24E EQB01-15 1S2473D RD-9.1E	F-2520 F-2521 F-2518 F-2515
VD1212	F-2515 F-2518
10D-1 	F-2520
31D27	F-2515
SG5T	Others

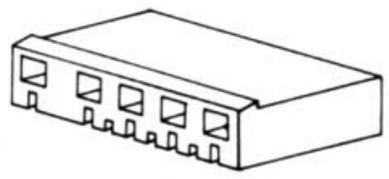
5-3. Connector & Pin Ass'y

Connector

A type 3~10 pins



B type 2~6 pins

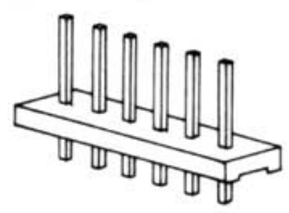


	Stock No.
2 Pins	2420250
3 Pins	2420220
4 Pins	2420230
5 Pins	2420210
6 Pins	2420240

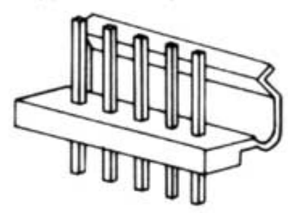
NOTE: Since stock number of famale connectors (type B) with wires are not shown in each parts list of Complete circuit board, please refer to the above parts list when ordering the connector.

Pin Ass'y

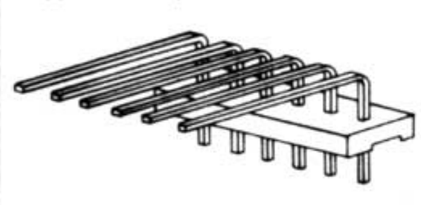
A type 3~10 pins



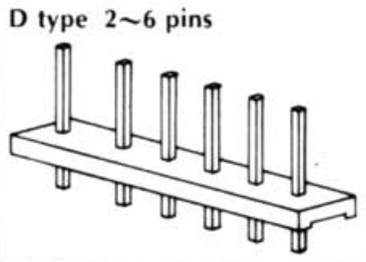
B type 3~10 pins



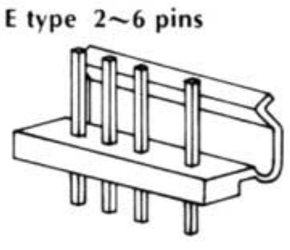
C type 3~10 pins



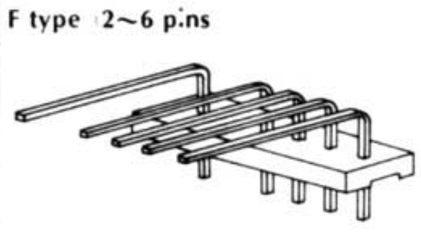
D type 2~6 pins



E type 2~6 pins



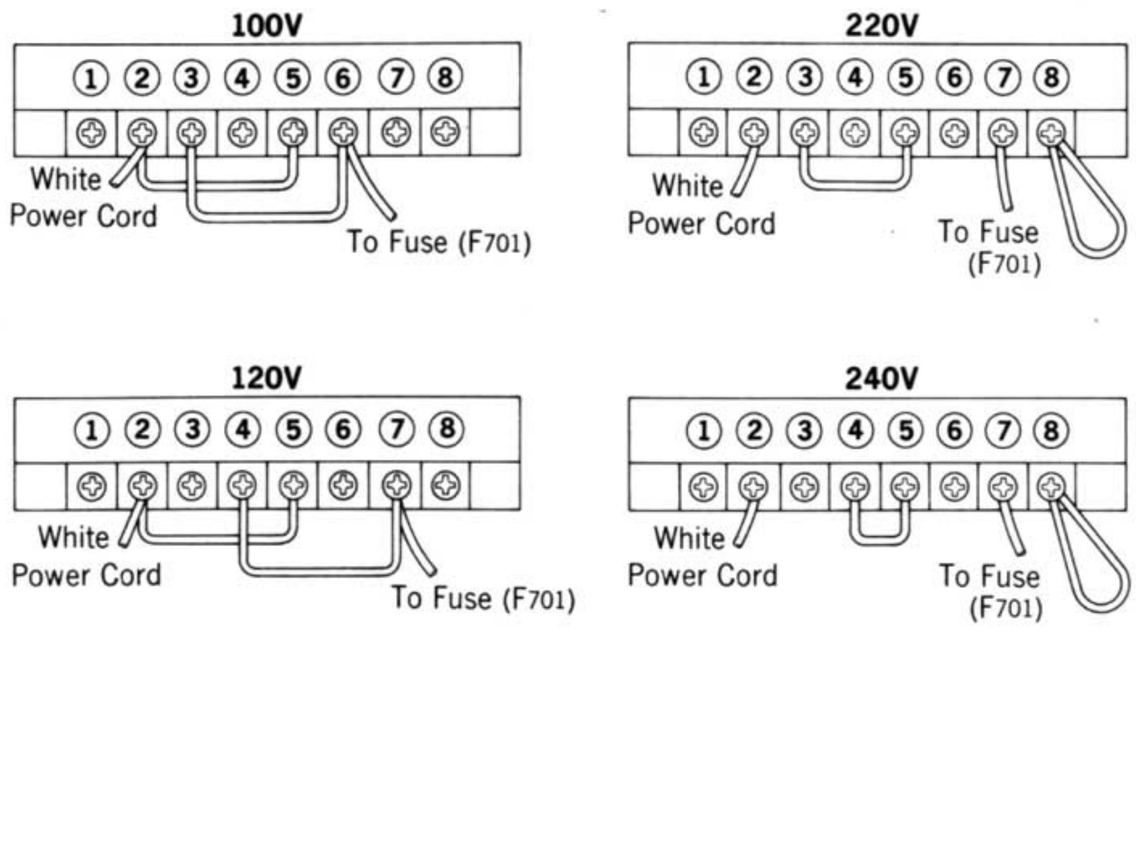
F type 2~6 pins



6. POWER SUPPLY VOLTAGE CHANGEOVER

*In accordance with AC line voltage in your area, input AC voltoges of this unit can be easialy obtained by changing connections as shown in Fig. 6-1.

Fig. 6-1



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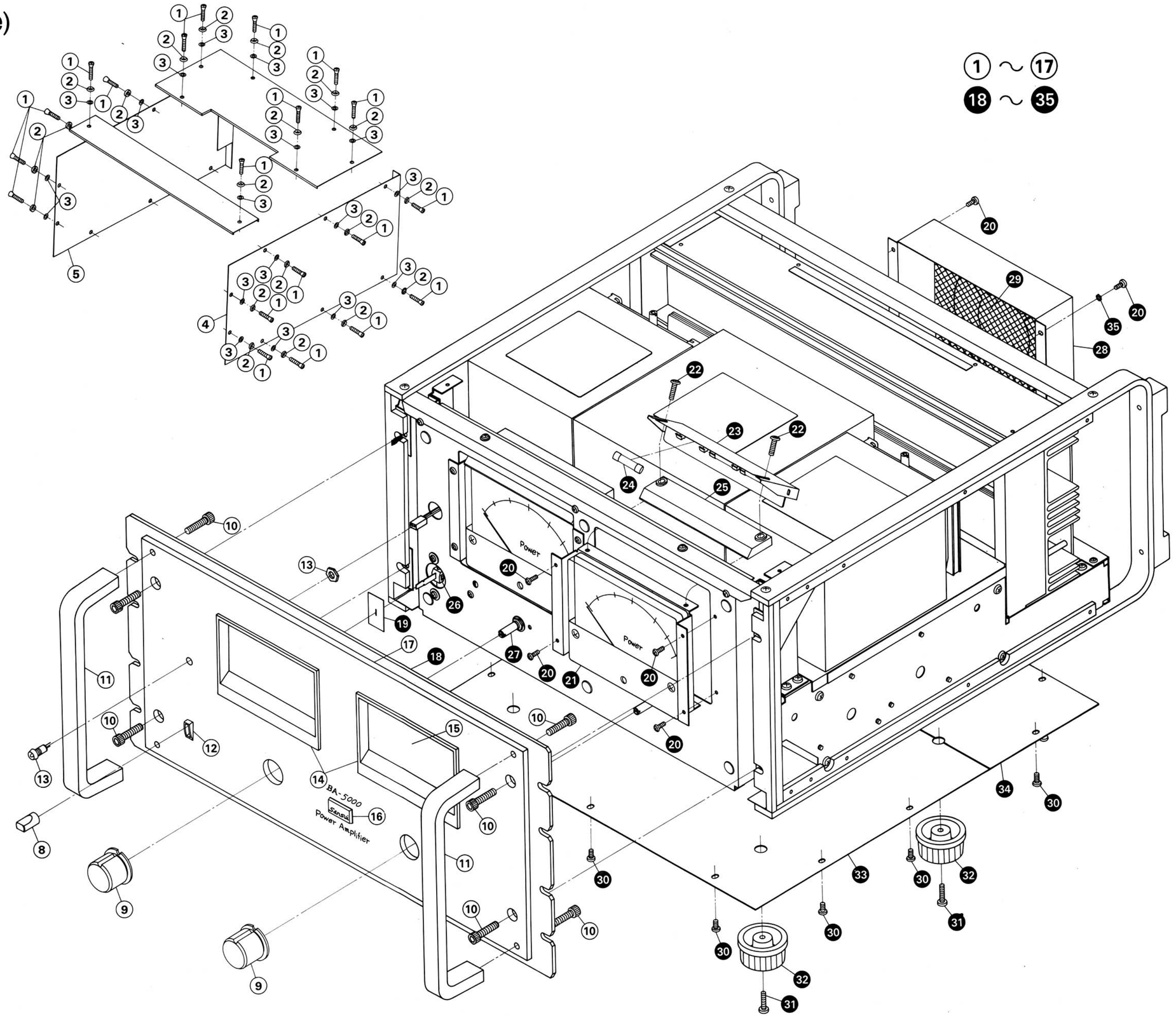
7. OTHER PARTS (Front Side)

Parts List (Front Side)

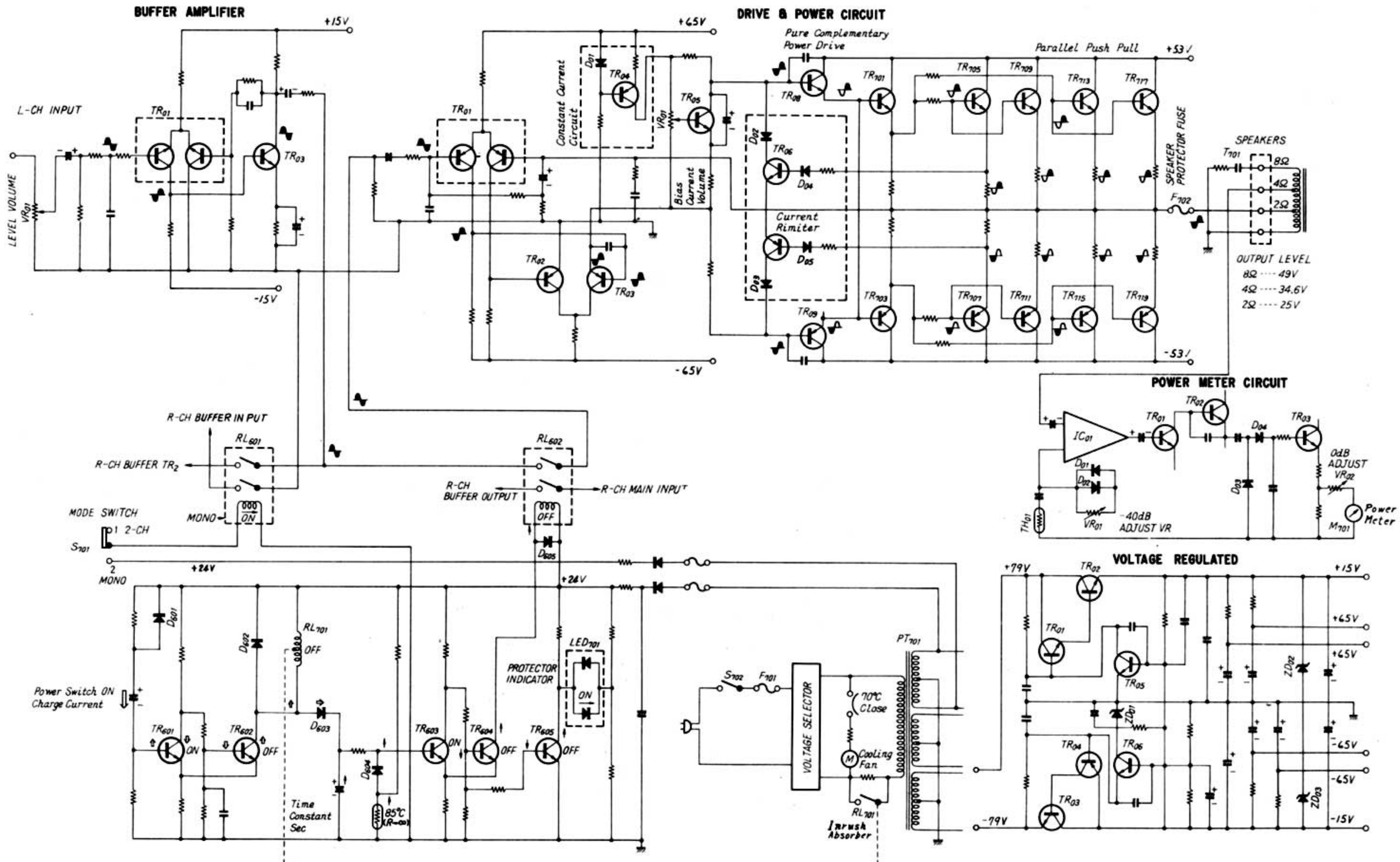
Parts No.	Stock No.	Description
1	5104044	Oval Countersunk Head Screw, M3×8
2	5123140	Corrugated Washer, 3ϕ
3	5186280	Plain Washer, 3ϕ (Fiber)
4	5026280	Side Cover (Right)
5	5026270	Side Cover (Left)
6	5058460	Front Cover
7	5058450	Rear Cover
8	5326510	E-2 Type Knob
9	5318240	A-6 Type Knob
10	5166630	Hexagon Socket Head Screw, M6×16
11	5396210	Angle
12	5286731	Lever Guide
13	7726120	Light Emitted Diode Ass'y
14	5309750	Meter Hood
15	5446220	Meter Grass
16	5336580	Badge
17	5309980	Main Panel
18	5309990	Sub Panel
19	5047460	Blind
20	5109222	Binding Head Tapping Screw, M3×8
21	4300850	Meter
22	5101149	Binding Head Screw, M3×16
23	5286690	Meter Lamp Cover
24	0420050	Fuse Type Lamp (7V, 300mA)
25	5446230	illumination Plate
26	1171010	Lever Switch
27	1090160	100kΩ(B) Level Volume
28	5026250	Fan Cover
29	4360010	Center Fan
30	5101143	Binding Head Screw, M3×6
31	5101164	Binding Head Screw, M4×12
32	5517050	Foot
33	5058470	Bottom Plate A
34	5058480	Bottom Plate B
35	5122540	Toothed Lock Washer (External), 3ϕ



8. TROUBLESHOOTING

* The Operation of each section is outlined in the block diagram shown below. Please utilize the diagram together with "Main Troubleshooting on Each Section" in this manual, if necessary.

8-1. Operation Block Diagram



8-2. Main Troubleshooting on Each Section

1. Troubleshooting on Power Supply Section

Symptom	Cause
1-1. ±B Voltage not supplied to F-2520, F-2518, F-2516, F-2515	
1) Trouble on primary of power transformar	1. Imperfect contact of power switch, S702
	2. AC Fuse, F01 blows
	3. R733, R734 on power supply section opens
	4. Defective relay, RL701
	5. Imperfect contact of voltage selector
2) ±53V Voltage not supplied to collector on each power transistor	6. Defective Diode, D701~D704
3) ±53V Voltage not supplied to F-2520, F-2515 and ±65V not to F-2518	7. AC Fuse, F01, F02 blows on F-2519
	8. Defective Diode, D01, D02 on F-2519
	9. Defective Transistor, TR02~TR06 on F-2521
	10. Defective Zener Diode, ZD01~ZD03 on F-2521

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2. Troubles on Power Amp. Section

Symptom	Cause
1) Speaker Fuse, F702 (F703) blows	1. Power transistor shorted
	2. Driver transistor TR701~TR704 Sharted
	3. Pre Driver transistor, TR08, TR09 Shorted
	4. TR05 on F-2518 opened
2) DC Bias Current not adjustable	5. Defective VR01
	6. Defective Power Transistor
3) Power Amp. Inoperative (Not blowing speaker fuse)	7. ±B voltages not supplied
	8. Imperfect contact of connector
	9. Defective TR01, TR02, TR03

3. Troubles on Buffer Amp. Section

1) Buffer Amp. Section Inoperative	1. AC Fuse, F601 (F602) blows on F-2520
	2. Defective Diode, D606 on F-2520
	3. Defective Transistor, TR01~TR03
2) MONO function inoperative	4. Imperfect contact of mode switch, S701 and Defective Relay, RL601

4. Power Meter Inoperative

	1. Meter position is not within 0dB ±1dB
	2. Defective IC01 on F-2515
	3. Defective Diode, D01~D04 on F-2515
	4. Defective Meter

5. Protector Section Inoperative

1) Relay, RL701 Inoperative	1. Defective R733, R734 3.9kΩ (10W)
	2. Defective Relay, RL701
	3. Defective Transistor, TR601 (TR602)
	4. Defective Capacitor, C601
2) Relay, RL602 Inoperative (Indicator lamp not lighted)	5. Defective Transistor, TR601~TR604
	6. Defective Capacitor, C601 (C603)
	7. Defective Diode, D603 (D604)
	8. Defective Relay, RL602

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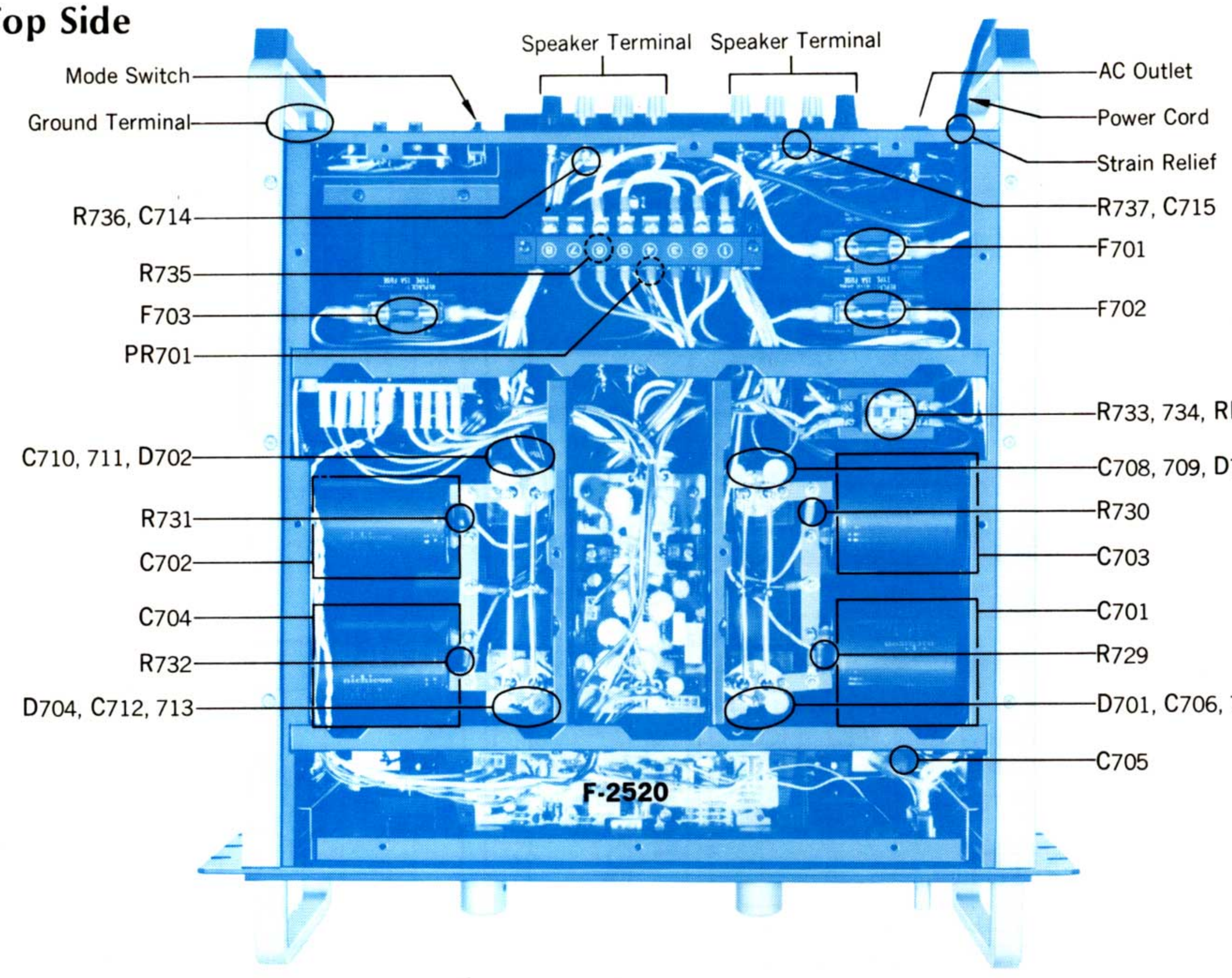
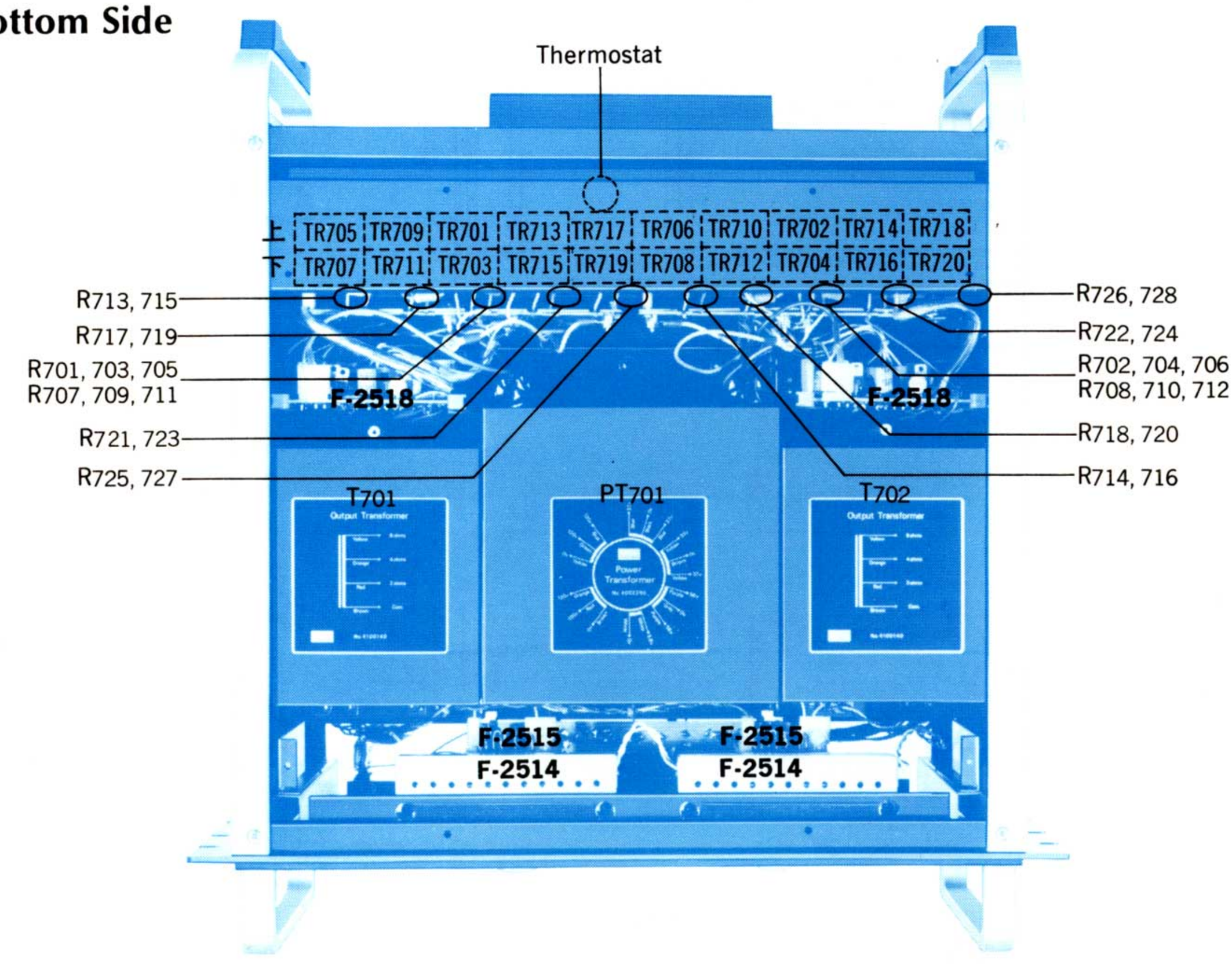
9. OTHER PARTS (Top, Bottom Side)

Top Side



Bottom Side



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Parts List (Top, Bottom Side)

Parts No.	Stock No.	Description
TR701, 702	0306331 or 0306332	2SC1116A (O) or 2SC1116A (Y)
TR703, 704	0300751 or 0300752	2SA747A (O) or 2SA747A (Y)
TR705, 706	0306310 or 0306311	2SC1585 (O) or 2SC1585 (Y)
TR707, 708	0300730 or 0300731	2SA908 (R) or 2SA908 (O)
TR709, 710	0306310 or 0306311	2SC1585 (O) or 2SC1585 (Y)
TR711, 712	0300730 or 0300731	2SA908 (R) or 2SA908 (Y)
TR713, 714	0306310 or 0306311	2SC1585 (O) or 2SC1585 (Y)
TR715, 716	0300730 or 0300731	2SA908 (R) or 2SA908 (O)
TR717, 718	0306310 or 0306311	2SC1585 (R) or 2SC1585 (O)
TR719, 720	0300730 or 0300731	2SA908 (R) or 2SA908 (O)
D701	0311440	SG-5TS } Diode
D702	0311440	SG-5TR } Diode
LD701	7726120	Light Emitted Diode Ass'y
PR701	0320120	PTH487A 01BE 302TS Thermistor
C701	0559512	22000μF } 63WV E.C.
C702	0559512	22000μF
C703	0559512	22000μF
C704	0559512	22000μF
C705	0605477	0.047μF 250V M.C.
C706	0659011	10000 pF } 500V C.C.
C707	0659011	10000 pF
C708	0659011	10000 pF
C709	0659011	10000 pF
C710	0659011	10000 pF
C711	0659011	10000 pF
C712	0659011	10000 pF
C713	0659011	10000 pF
C714	0601108	0.1μF } 50V M.C.
C715	0601108	0.1μF
R701	0152100	10Ω } 2 W Ce.R.
R702	0152100	10Ω
R703	0152100	10Ω
R704	0152100	10Ω
R705	0104479	4.7Ω } 1 W Ce.R.
R706	0104449	4.7Ω
R707	0104479	4.7Ω
R708	0104479	4.7Ω
R709	0104479	4.7Ω
R710	0104479	4.7Ω } 1 W Ce.R.
R711	0104479	4.7Ω
R712	0104479	4.7Ω

Parts No.	Stock No.	Description
R713	0155338	0.33Ω } 5 W Ce.R.
R714	0155338	0.33Ω
R715	0155338	0.33Ω
R716	0155338	0.33Ω
R717	0155338	0.33Ω
R718	0155338	0.33Ω
R719	0155338	0.33Ω
R720	0155338	0.33Ω
R721	0155338	0.33Ω
R722	0155338	0.33Ω
R723	0155338	0.33Ω
R724	0155338	0.33Ω
R725	0155338	0.33Ω
R726	0155338	0.33Ω
R727	0155338	0.33Ω
R728	0155338	0.33Ω
R729	0104472	4.7kΩ } 1 W C.R.
R730	0104472	4.7kΩ
R731	0104472	4.7kΩ
R732	0104472	4.7kΩ
R733	0159080	3.9Ω } 10W Ce.R.
R734	0159080	3.9Ω
R735	0153121	120Ω 3 W Ce.R.
R736	0155479	4.7Ω } 5 W Ce.R.
R737	0155479	4.7Ω
T701	4100140	T-8537 } Outout Transformer
T702	4100140	T-8537
PT701	4002260	Power Transformer
RL701	1150350	LY2-SA Relay
S701	1110300	SSB02225 Slide Switch
S702	1171010	Lever Switch
F701	0434040	15A 250V } Fuse
F702	0433040	15A 250V
F703	0433040	15A 250V
	1910010	Thermostat
	2210290	Speaker Terminal
	2230051	Ground Terminal
	2310200	Fuse Holder
	2450060	AC Outlet
	3800280	Power Cord
	3910570	Strain Relief

* When replacing Transistor in column A, use one in column B certainly. Letter (O, R or Y) is shown on the head of Transistor (See Fig. 9-1).

Fig. 9-1

Parts No.	A	Mark	Parts No.	B	Mark
TR701	2SC1116A	O	TR701	2SC1116A	O
TR701	2SC1116A	Y	TR701	2SC1116A	Y
TR703	2SA747A	O	TR703	2SA747A	O
TR703	2SA747A	Y	TR703	2SA747A	Y
TR705, TR709 TR713, TR717	2SC1585	O	TR705, TR709 TR713, TR717	2SC1585	O
TR705, TR709 TR713, TR717	2SC1585	Y	TR705, TR709 TR713, TR717	2SC1585	Y
TR707, TR711 TR715, TR719	2SA908	O	TR707, TR711 TR715, TR719	2SA908	O
TR707, TR711 TR715, TR719	2SA908	R	TR707, TR711 TR715, TR719	2SA908	R

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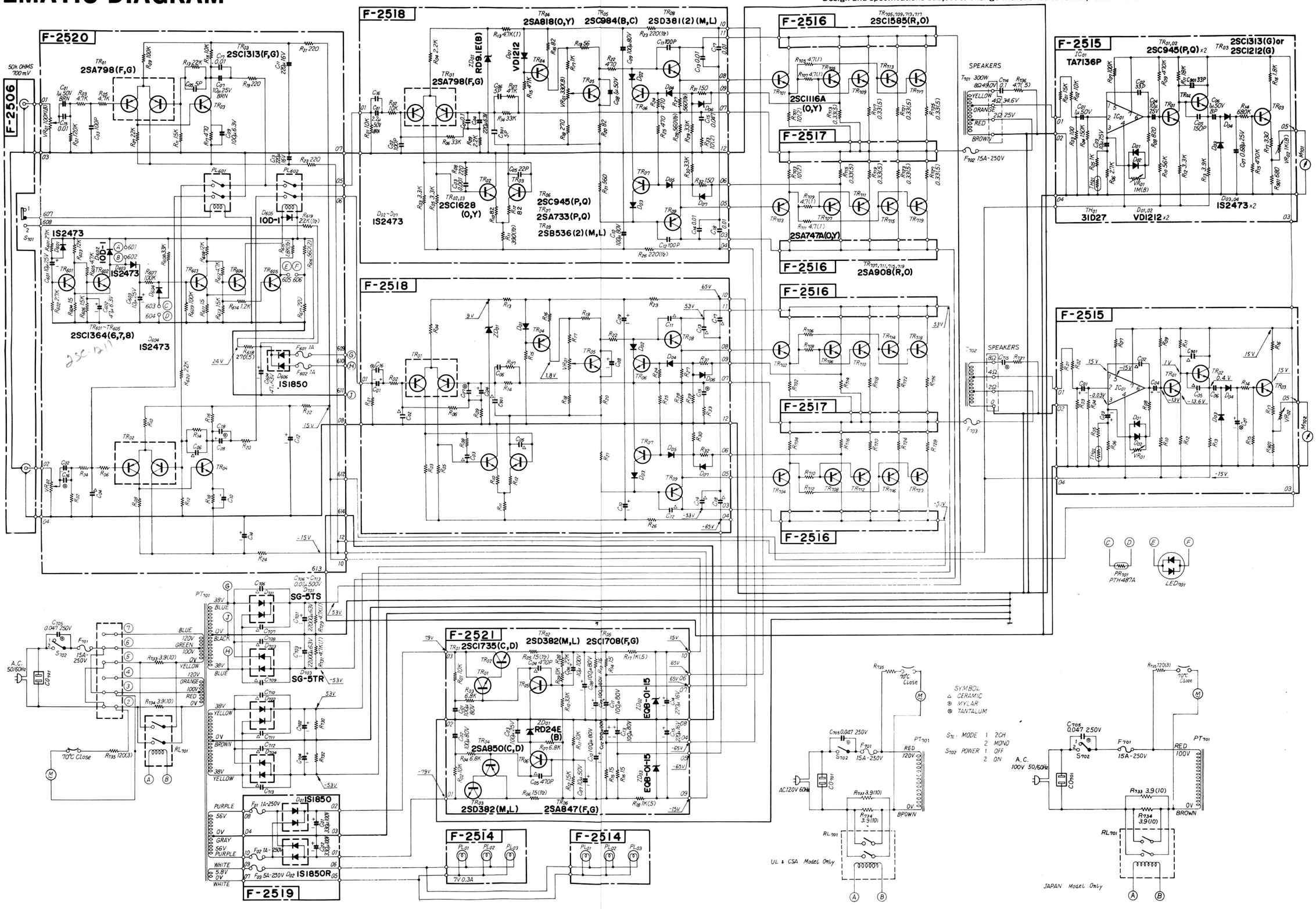
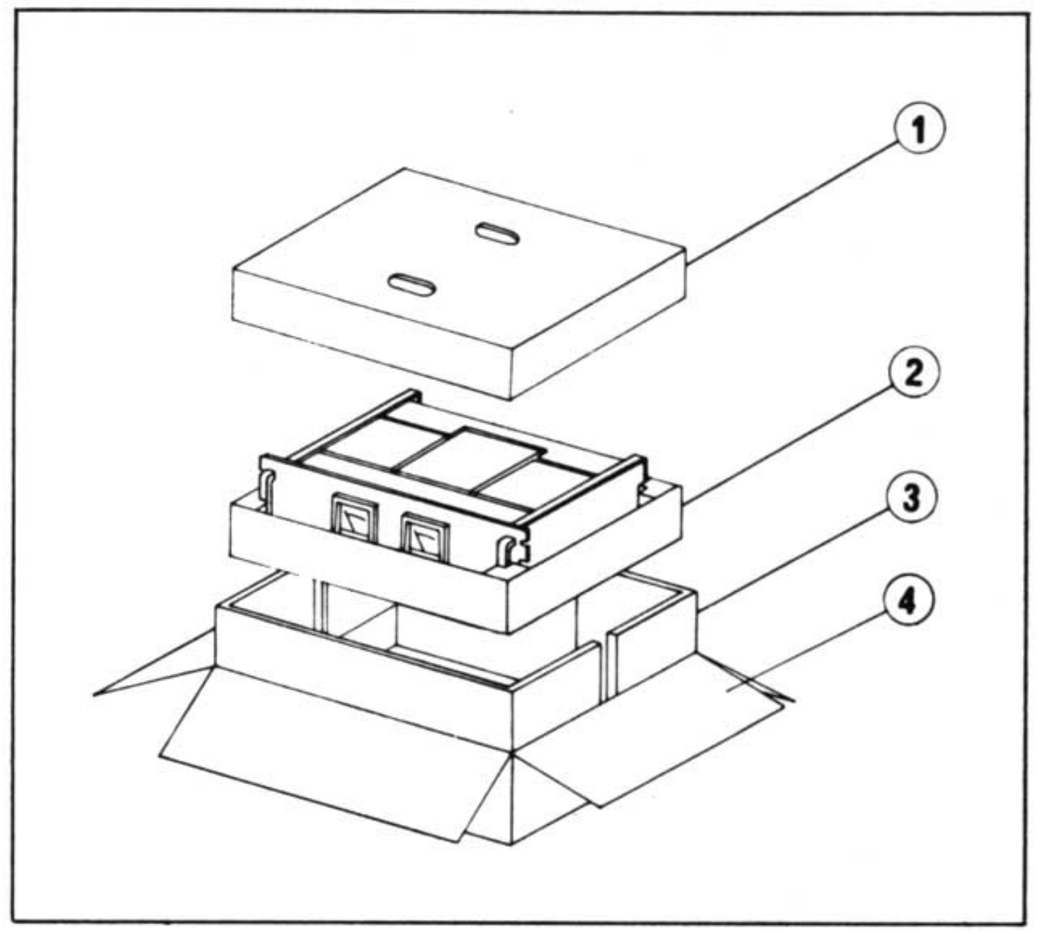
10. SCHEMATIC DIAGRAM

* La présentation et les spécifications sont susceptibles d'êtra modifiées sans préavis par suite d'améliorations éventuelles.
* Anderunger, die dem technischen Fortschritt dienen, bleiben vorbehalten.
* Design and specifications subject to change without notice for improvements.



11. PACKING LIST

Parts No.	Stock No.	Description
1	9017740	Packing (Top)
2	9017750	Packing (Bottom)
	9116660	Vinyl Cover
3	9017730	Corner Packing
4	9008330	Carton Case
	5996080	Curl Stopper



12. ACCESSORY PARTS LIST

Stock No.	Description
9208940	Operating Instructions
9236990	Schematic Diagram

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